Katharine Page—Atomic-level insights for better materials

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A Love for Science

Impassioned by materials science, Katharine Page told her college magazine almost 10 years ago to this day, “I love the progression of science. It’s exciting to think about being in a field that’s starting up, with so much that can be looked into. I hope that in 10 years, I’ll be contributing to the field.” She got her wish.

Today, Page leads a team at Los Alamos that uses the Neutron Powder Diffractometer (NPDF, a neutron scattering instrument also used for crystallography) to investigate atomic-level structures. Page's research supports materials' advances that could have wide-ranging impact, investigating, manipulating and manufacturing particles at a level that is one-billionth of a meter small.

For example, her examination of the fluid-mineral interface in carbonate materials at growth conditions similar to those found in underground reservoirs may improve future carbon sequestration methods.

Los Alamos inspires big changes, one atom at a time

Although she studied chemical engineering and was a NASA intern, it was Page's work with scientists at the Lab's Lujan Neutron Scattering Center during a college internship that opened her eyes to the intricacies of nanostructures, inspiring her to study materials science in grad school and pursue a career in the dynamic field.

After getting her doctorate in materials, she completed a Director's Postdoctoral Fellowship at Los Alamos, studying neutron and synchrotron radiation at facilities around the world before becoming a staff scientist in 2011.

Excited about solving the mysteries behind the expanding complexity of engineering materials, Page says her team is learning how to make the world more secure, energy efficient and environmentally friendly.

She is equally fervent about the Lab's role in training, educating and inspiring the next generation that will tackle future challenges. Dedicated to helping kids love science in various outreach activities, Page advises young women to be unafraid of exploring new career options and to always ask questions and learn from others along the way.

Still quite young herself but very accomplished (a three-time collegiate national champion athlete who competed in the Olympic trials while finishing her Ph.D. has also published book chapters), the new mother was recently named one of the Lab's Women Who Inspire.